# Air Lift **1000**<sup>™</sup>

Since 1949

# **Installation Guide**



### Ford Bronco Sport/Escape

Watch the video Info on Table of Contents page

# Kit 60858

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation. Failure to read these instructions can result in an incorrect installation.

MN-1165 • Revision 012202 • ERN 9934

# **Protect your Air Lift Purchase by Completing your Warranty Registration**



Thank you for purchasing an Air Lift load support product!

Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

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# **Hardware and Tools**

#### HARDWARE LIST

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Item	Part#	DescriptionQty
А	46136	Air spring2
В	20937	Air line
С	10466	Zip ties6
D	21230	Valve cap2
Е	21233	5/16" Hex nut
F	21234	Rubber washer2
G	18411	Star washer2
Н	18501	M8 flat washer2
1	21236	Tee fitting1
J	21455	Schrader valve
Κ	10638	Air line clamp6
		•

#### **TOOLS NEEDED**

DescriptionQty Needle nose and regular pliers1
Nocale hose and regular photometric structure in the
5/16" Drill bit
Drill1
Hose cutter, razor blade or sharp knife1
Hoist or floor jack1
Safety stands
Safety glasses
Air compressor or compressed air source1
Spray bottle with dish soap/water solution1
Tire spoon or blunt instrument1



# Introduction

The purpose of this publication is to assist with the installation and maintenance of the Air Lift 1000 air spring kit.

Air Lift 1000 kits utilize a cylinder-style air bag that provides up to 1,000 pounds (454kg) of load-leveling support when installed into the vehicles coil springs. Each cylinder is rated at a maximum of 35 PSI (2.4BAR).

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair.

#### NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



#### DANGER

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



#### WARNING

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

#### CAUTION

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE VEHICLE OR MINOR PERSONAL INJURY.



Used to help emphasize areas of procedural importance and provide helpful suggestions.



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

# **Installing the System**

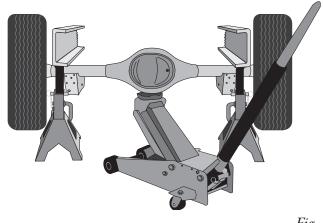
#### PREPARE THE VEHICLE

- Jack up the rear of the vehicle or raise on hoist. Support the frame with safety stands (Fig. 1).
- 2. Lower the axle or raise the body until the coil springs are completely extended (wheels hanging).



AIRLIFT

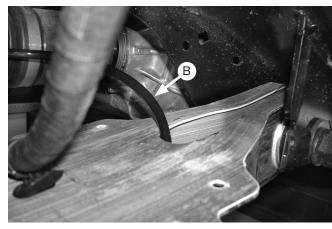
OBSERVE TENSION ON BRAKE LINES. DO NOT STRAIN OR OVEREXTEND INSTALLING THE AIR LIFT 1000 SYSTEM.





#### INSTALL THE AIR SUSPENSION

 Insert one end of the air line (B) into the top center hole of the lower control arm, next to the inside pivot point and push line toward lower spring seat hole (Fig. 2).



*Fig. 2* 

2. Using a coat hanger or equivalent, fish the air line out of the lower control arm and up through the lower control arm spring seat mount hole (Fig. 3).



Coat hanger or equivalent

Fig. 3



 Remove the black plastic cap from the barbed stem on the end of the air spring (A). Exhaust the air from the air spring by rolling it up toward the barbed stem. Replace the cap on the stem to hold its flat shape. Fold the air spring into a "hot dog bun shape" (Fig. 4).







THE LOWER CONTROL ARM HAS SHARP EDGES. BE CAREFULL WHEN WORKING AROUND THIS AREA.

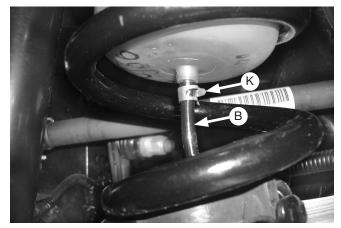
4. Insert the flattened end of the air spring (A) into the top opening of the coil spring (with the stem at the bottom) (Fig. 5). Push the air spring down into the coil spring by hand or with a blunt instrument such as a spoon-type tire iron.



Insert cylinder with stem pointing down

Fig. 5

- 5. When the air spring is completely in the coil, remove the cap and allow the air spring to assume its "as molded" shape. Push the cylinder up to the top of the coil spring.
- 6. Using a pair of pliers, slide an air line clamp (K) over one end of the air line (B). Push the air line over the barbed stem of the air spring completely and slide the clamp over the barbed stem area (Fig. 6). Once the air line is installed, completely push the cylinder to the bottom of the coil spring.







 Route the air line up to the top of the upper crossmember, forward of the control arm. Leave some slack for articulation. Secure the air line to the upper crossmember with zip ties (C). Review air line installation instructions and repeat for the other side.

The following is an example of where you can install the Schrader valve (J).



If you choose to install the Schrader valve in this manner it is important that you install and use the valve cap (D) to keep debris (from the tire) contaminating the valve core in the Schrader valve.

 Route the hose to the upper, left side crossmember and install the tee fitting (I) using the air line clamps (K) (Fig. 7).

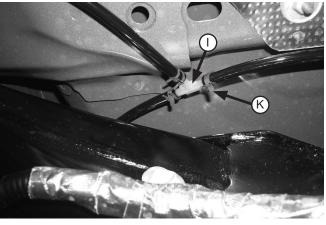
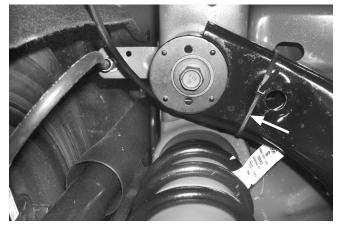


Fig. 7

9. Route the air line above the rear upper crossmember and secure to the end using zip ties (Fig. 8).







10. Continue to run the air line back behind the inner fender well and, using the bumper, find a location for the Schrader valve. Try to keep as far away from the tail pipe as possible (Fig. 9). Secure the air line to the body using a zip tie (C) as shown.

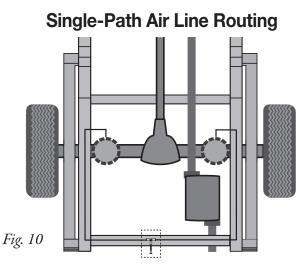


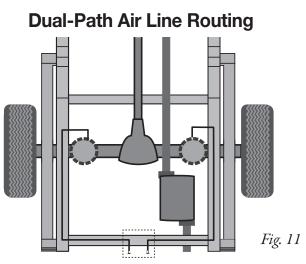
Suggested Schrader valve assembly location Fig. 9



# **Installing the Air Lines**

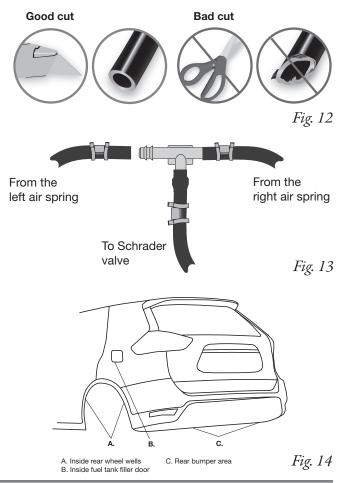
 A single-path air line installation is recommended for vehicles that typically have even weight distribution (Fig. 10). If weight in the vehicle varies from side to side and unequal pressures are needed to level the load, use a dual-path installation. For dual-path air line installations, eliminate the tee fitting (I) and route separate air lines for both air springs (Fig. 11).





TO PREVENT THE AIR LINE FROM MELTING, MAINTAIN AT LEAST 6" (152MM) FROM THE EXHAUST SYSTEM TO THE AIR LINE.

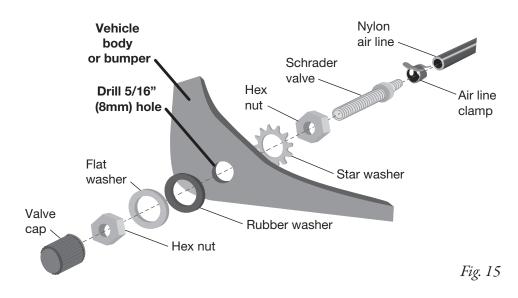
- If installing a single-path air line, choose a location for the tee fitting on the wheel well or rear bumper. Determine and cut adequate length of air line (B) to reach to the tee from left and right side air springs. Make clean, square cuts with a razor blade or hose cutter (Fig. 12). Do not use scissors or wire cutters.
- 3. Leave sufficient air line slack to prevent any strain on the fitting during axle motions.
- 4. Use this procedure (Fig. 13) for all air line connections:
  - a. Slide the air line clamp (K) onto the air line.
  - b. Push the air line and air line clamp over the barbed stem so that the air line covers all the barbs.
  - c. Compress the ears on the air line clamp with pliers and slide it forward to fully cover the barbs.
- 5. Select a location for the Schrader valve (J), ensuring that the valve will be protected and accessible with an air hose (Fig. 14). Drill a 5/16" (8mm) hole, if necessary. Determine and cut adequate length of air line to reach from the tee to the Schrader valve or from the air springs to the valve if using a dual-path installation.





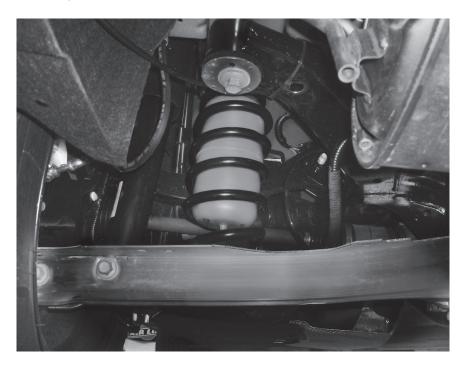
6. Drill a 5/16" (8mm) hole for the Schrader valve and mount as shown (Fig. 15). Install the air line on the Schrader valve first. The rubber washer (F) serves as an outside weather seal.

DO NOT INFLATE THE AIR SPRINGS BEFORE READING THE MAINTENANCE AND USE GUIDELINES IN THIS INSTALLATION GUIDE AS WELL AS THE USER GUIDE INCLUDED WITH THIS KIT.



#### **COMPLETE THE INSTALLATION**

1. Once the air lines have been installed, raise the suspension or lower the body completely and remove the safety stands. Inflate the air springs to 5 PSI (.34BAR).



### **Congratulations!**

You are now the proud owner of an industry leading Air Lift air suspension system. Enjoy!

□ **Road test** – The vehicle should be road tested

fasteners and air leaks.

after the preceding tests. Inflate the air springs to

recommended driving pressures. Drive the vehicle

10 miles (16km) and recheck for clearance, loose

□ **Operating instructions** – If professionally installed,

the paperwork that came with the kit.

the installer should review the operating instructions

with the owner. Be sure to provide the owner with all of

# **Before Operating**

#### **INSTALLATION CHECKLIST**

- Clearance test Inflate the air springs to 30 PSI (2BAR) and make sure there is at least 1/2" (13mm) clearance from anything that might rub against each air spring. Be sure to check the tire, brakes, frame, shock absorbers and brake cables.
- Leak test before road test Inflate the air springs to 30 PSI (2BAR) and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.
- □ Heat test Be sure there is sufficient clearance from heat sources, at least 6" (152mm) for air springs and air lines. If a heat shield was included in the kit, install it. If there is no heat shield, but one is required, call Air Lift customer service at (800) 248-0892.
- MAINTENANCE AND USE GUIDELINES
- 1. Check air pressure weekly.
- 2. Always maintain normal ride height. Never inflate beyond 35 PSI (2.4BAR).
- 3. If the system develops an air leak, use a soapy water solution to check all air line connections and the inflation valve core before deflating and removing the air spring.
- 4. Upon successful completion of the installation, follow these pressure requirements for the air springs.





FOR SAFETY AND TO PREVENT POSSIBLE DAMAGE TO THE VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR) OR PAYLOAD RATING, AS INDICATED BY THE VEHICLE MANUFACTURER.

ALTHOUGH THE AIR SPRINGS ARE RATED AT A MAXIMUM INFLATION PRESSURE OF 35 PSI (2.4BAR), THE AIR PRESSURE ACTUALLY NEEDED IS DEPENDENT ON LOAD AND GROSS VEHICLE WEIGHT RATING.

# **Notes**





# **Limited Warranty and Return Policy**

Air Lift Company provides a limited lifetime warranty to the original purchaser of its load support products, that the products will be free from defects in workmanship and materials when used on cars and trucks as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available at www.airliftcompany.com/warranty.

For additional warranty information contact Air Lift Company customer service.



Thank you for purchasing Air Lift Products — the Authorized Installer's choice!

### **Need Help?**

Contact Air Lift Company Customer Service at (800) 248-0892 or email service@airliftcompany.com.

For calls outside the U.S. or Canada, dial (517) 322-2144.



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Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or P.O. Box 80167 • Lansing, MI 48908-0167

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